

No. 15,113

IN PACE

United States Court of Appeals

FOR THE NINTH CIRCUIT

YATES STEEL PRODUCTS CORPORATION,

Respondent,

vs

Overland Payments Co., a corporation,

Appellant.

APPELLANT'S OPENING BRIEF

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JOSE F. WENZEL, CLERK

Hickory and Quarry:

210 West Seventh Street,
Los Angeles 14, California.

Attorneys for Appellant-Appellee

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No. 16,143

IN THE

United States Court of Appeals

FOR THE NINTH CIRCUIT

AETNA STEEL PRODUCTS CORPORATION,

Appellant,

vs.

SOUTHWEST PRODUCTS Co., a corporation,

Appellee.

APPELLANT'S OPENING BRIEF.

This is an appeal by defendant from a judgment and decree of the District Court for the Southern District of California, Central Division [R. 174]. The cause of action as stated in the Complaint [R. 3] is one for alleged infringement of Potter patents Nos. 2,626,841 and 2,724,172 for a bearing and its method of manufacture. Plaintiff is a California corporation and owns the patents. Defendant is a New York corporation and owns and operates Kahr Bearing (as a Division) in Burbank, California. Jurisdiction of the trial court arises under 28 U.S.C. §1338, and the Patent Laws Title 35 U.S.C.

Defendant's Answer [R. 6] and First Amended Answer [R. 79] denied validity and infringement of the

*Appellant shall be referred to herein as defendant; references to the printed record are identified as R. followed by the page number.

Potter patents in suit and asserted affirmative defenses. A Pretrial Conference Order was entered October 28, 1957 [R. 28] and then vacated because plaintiff filed 106 Requests for Admissions on November 11, 1957. Defendant moved for Summary Judgment December 12, 1957 [R. 42] and this was denied December 30, 1957. A new Pretrial Conference Order was entered February 24, 1958 [R. 85].

After twelve days of trial and argument the Trial Court held both Potter patents valid and that defendant infringed claims 1 and 2 of patent No. 2,626,841 and claims 1, 2, 3, 4 and 6 of patent No. 2,724,172.

JURISDICTION.

Jurisdiction to review the judgment and decree of the District Court is conferred by 28 U.S.C. §1291. The judgment and decree was entered on June 12, 1958, and Notice of Appeal filed by defendant June 13, 1958. The appeal was timely taken in accordance with Rule 73 of the Federal Rules of Civil Procedure (28 U.S.C. Rule 73(a)) and the Rules of this court.

STATEMENT OF THE CASE.

By its complaint, plaintiff charged the defendant with infringement of Potter Patent 2,626,841 (allegedly covering a bearing) and of Potter Patent 2,724,172 (allegedly claiming the method of making the bearing covered by the first patent). The bearings are what are known as self-aligning bearings; they consist of a ball and an outer race in which the ball is rotatably held. There is no question but that these two elements are old, both individually and in combination. Your Honors will recall that practically every C clamp has at one end thereof a ball retained in a spherical socket, the ball being provided with a foot

so that the C clamp can exert its pressure through the ball bearing onto the material being clamped. A glance at Fig. 7 or 8 of the expired Fiegel patent 1,693,748 [Exh. D, R. 1368], shows that two-piece bearings consisting of an outer race and an inner ball are old. The functional relationship between ball and race is the same in the prior art bearings and in the bearing shown in the Potter patents.

Your Honors are familiar with bearings and affirmed a judgment holding a bearing patent invalid *n.o.v.* in *Stallman v. Casey Bearing Company, Inc.*, 244 F. 2d 905 (No. 15328). The Stallman patent was for a needle-type bearing, while here we have a simpler and older bearing consisting only of the outer race ring and a central rotatably held ball with a hole in it.

As in all bearings, there must be a suitable clearance, tolerance or play between the race and the ball to permit movement without excessive friction or without excessive play. As in the *Stallman* case, the specification and claims of the patents here in suit do not disclose what the clearance tolerance or play should be. If this clearance is critical, then the claims do not define it except by stating it is sufficient to permit the smooth rotation, as in all bearings ever made.

Attention is drawn to the failure of the patents to specify a given clearance because plaintiff has built a false issue around clearance. It is false because it is not stated in the claims.

“It is the claim, of course, which measures the grant to the patentee” (citing cases) *Stallman v. Casey Bearing Company, Inc.*, *supra*.

The trial of the case consumed twelve days. During the trial, plaintiff introduced voluminous testimony and a great

number of unnecessary exhibits pertaining to the manufacture and sale of bearings by plaintiff allegedly made per the patents. Such evidence was irrelevant, immaterial and unnecessary because the Pretrial Order included admissions that plaintiff had commercially made and sold bearings made in accordance with both of the patents prior to October, 1951. [Admitted facts, R. 997]. Plaintiff's counsel conceded that there was no question about the prior manufacture and use of the bearings by the plaintiff.

"The Court: He claims that the product was made and used more than one year prior to the date of the filing of the patent.

Mr. Lyon: That is conceded. There is no issue on that.

The Court: Made and sold?

Mr. Lyon: Made and sold." [R. 200.]

Since the manufacture, sale and use of the bearings in accordance with the patents here in suit prior to October, 1951 (which is more than one year prior to the date of the filing of the second Potter patent) was conceded and "there is no issue on that," then, obviously, all of the testimony and exhibits pertaining to the various sales made prior to 1951 should not burden the record unnecessarily. The second Potter patent should have been held invalid on the above admission alone, and 35 U.S.C. 102(b).*

At the conclusion of the trial, the court rendered its opinion from the bench, holding both Potter patents valid and infringed. The reasons advanced show that the **court did not apply the correct criteria of law and the standard of invention** required by the Constitution and

*Note: All pertinent sections of Title 35 of the U. S. Code are reproduced in the Appendix.

the rulings of the Supreme Court [R. 1286-1288]. The findings are in error because they are contrary to the evidence. They are in error because they hold that invention can be found in minor changes in degree, such as increased strength and thickness without change in function or relationship.

“The Supreme Court has held that the determination by the trial court of the question of invention need not be accorded the respect given ordinary findings of fact.” (Citing cases.) *Oriental Foods, Inc. v. Chun King Sales, Inc., et al.*, 244 F. 2d 909 (CA 9).

The primary issue is that the trial court erred in holding the patents valid. A secondary issue is that of infringement; defendant contends that there is no evidence to support the finding of infringement. These issues are raised by the Notice of Appeal [R. 176] and the Concise Statement of Points on Appeal [R. 176].

Plaintiff has alleged that the bearing of the first Potter patent was dependent upon the discovery of the method of the second patent in suit [R. 17]. Briefly stated, the method of the second patent '172 is a two-step method. The first step contemplates taking a cylindrical or tubular outer race having inclined, frusto-conical end faces, placing a ball within this cylinder and then forming the race around the ball. The particular forming operation described in the patents is coining, wherein pressure is applied to the conical end faces of the outer ring. Plaintiff's interpretation also contemplates that the coining operation of the Potter patents will cause the outer race to closely, intimately and directly contact the ball so as to hold the ball immovable within the race. This “direct and intimate” contact between the entire inner surface of the race and the ball is essential and necessary to the Potter patents.

“Q. (By Mr. Miketta): You consider that it is essential that there be intimate contact over the entire inner surface of the race with the ball, is that correct?

A. Yes, sir. * * *” [Pltfs. expert Barish at R. 900.]

This complete contact and engagement is said to be the “novel concept” of the Potter patents [Finding XX, R. 162].

After this forming by coining, the second step contemplates a loosening of the ball to permit it to turn within the race. This loosening is accomplished by hammering or rolling the outer race so as to spread the metal and enlarge the bore of the race so as to develop the desired clearance.

These two steps are old and not inventive individually. They are also old in sequence and in combination. Patent '172 is invalid.

Plaintiff's counsel and witnesses have asserted that the alleged commercial success of their bearing is due to the clearance between the ball and the race; this clearance is not defined in their claims. The smoke screen about unspecified clearance, adroitly raised by plaintiff (to cover the inherent invalidity of both of the patents) caused the trial court to make totally erroneous findings, such as Finding II holding

“II. Potter Patent No. 2,626,841 relates to a self-aligning bearing and more particularly to a simple two-piece spherical bearing consisting of a ball with flattened ends and a race presenting a continuous bearing surface in which the race is *separated* from the ball by a very small and uniform controllable clearance and is *thereafter liberated or loosened* uniformly.”

If the race is separated from the ball by "a small * * * clearance," then the ball is rotatable in the race. It is a bearing that **does not need** to be "thereafter liberated or loosened uniformly." This finding demonstrates that the trial court did not understand the facts. The finding is not only contrary to plaintiff's contentions and the testimony of its experts, but is contrary to facts and to the patent itself. It is in irreconcilable conflict with Finding XX which states that

"* * * substantially all of the entire available adjacent surfaces of the ball and its formed race are in direct and intimate contact, as set forth in the claims of the '172 patent, to such an extent that the ball actually become '**frozen**' in the race with substantially all of the entire available adjacent surfaces in binding engagement. Due to such binding, there is a condition of 'zero' clearance between the substantially all of the entire available adjacent surfaces of the ball and its race. * * * Thus, another novel concept is that the pressures applied to the race member in its formation should be sufficiently large * * * that substantially all of the adjacent surfaces of the ball and its race remain in **direct and intimate engagement** after release of this pressure." [R. 161-162.]

Although the first Potter patent in suit '841 allegedly relates to an article, namely a bearing, no one (including the trial court) has been able to state whether the claims of this first patent '841 refer to a bearing assembly after forming and with a ball non-rotatably held by the race or to a finished bearing after the hammering or loosening step. During prosecution before the Patent Office, Potter represented that the claims *did not cover a finished bearing* [Exh. A, p. 26].

During trial plaintiff's expert Barish represented that the claims of '841 *covered the finished bearing* after hammering [R. 427, 683-4].

If the inventor and plaintiff cannot agree as to what the claims mean, then the claims are invalid because of indefiniteness. Finding of Fact II is incomprehensible and obvious error.

During the trial the court denied defendant's motion to strike the testimony of Barish concerning Exhibits 55, 56 and 57 and photoelasticity when the witness Barish admitted that he was not an expert on photoelasticity. The court further erred in refusing to permit defendant's expert witness to state his opinion with respect to similarity of defendant's operation and prior art disclosures. These errors are specifically referred to in defendant's Points on Appeal, items 11 and 12, and will be referred to in greater detail hereinafter.

THE PATENTS IN SUIT.

It is urged that the two patents in suit are invalid for lack of invention and, in addition, that they are invalid on statutory grounds because new matter was improperly added by amendment; method claims were abandoned and the application for the second patent was filed so late as to be barred by prior commercial use. In order to assist this court in understanding the chronology as evidenced by the file histories of the patents, attention is called to appended Chart I.

The application for the first Potter patent '841 was filed in July, 1945. The patent is Pltfs. Exh. 1 [R. 1296] and the file history is Defs. Exh. A. This original application contained claims both to the bearing itself and to the method of making the bearing. In the graph, the

GRAPHIC CHRONOLOGY ESTABLISHES INVALIDITY

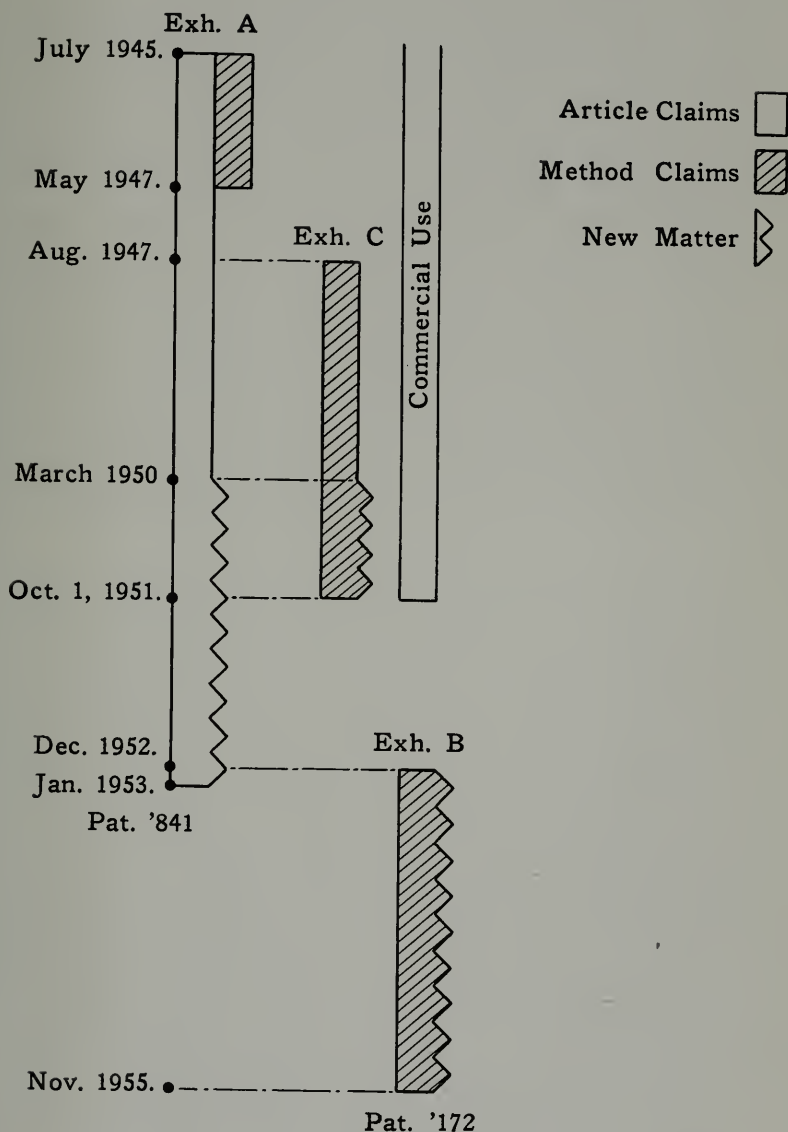


CHART I



method claims are indicated by the hatched areas. In May of 1947, the Patent Office required division between the method and product claims and the method claims were removed and cancelled from the application. In August 1947, Potter filed a so-called divisional application [Defs. Exh. C]. This application now contained the method claims. Both applications A and C were prosecuted and both applications were repeatedly rejected by the Patent Office. In March 1950, both of these applications, Exhibits A and C, were amended and *new matter* was added. This new matter is indicated in the graph by the saw teeth (adjacent each column representing an application). Attention is drawn to this *new matter* because it did not appear in the original application as filed and its improper addition resulted in the erroneous and mistaken allowance of the first patent '841 in January, 1953.

Different Patent Office Examiners handled application A and application C. The Examiner who handled the divisional application C (containing the method claims) recognized that the matter added by amendment was new matter and improper, and finally rejected the application. [December 11, 1950, see page 21, Exh. C]. On June 11, 1951, the application was abandoned and on October 1, 1951, the Patent Office Court of Appeals dismissed the appeal for lack or failure to file a brief [p. 33, Exh. C].

Throughout the period of time from 1945 to October 1951, plaintiff was manufacturing and selling bearings in accordance with both the article patent and the method patent '172. This is indicated on the graph as "Commercial Use Admitted." [See Admissions Nos. 25, 29 and 33, R. 996-7; Hackman R. 263 and 426; Pltfs. Counsel R. 200.]

In December 1952, about fifteen months after the method application, Exh. C, had been abandoned, Potter filed an application, Exh. B, soliciting method claims. This application included the new matter previously acknowledged to be improper by abandonment of application Exh. C. It is to be noted that during the fifteen month period from October 1, 1951, until December 1952, no claims directed to the method of manufacturing the bearing were being solicited before the Patent Office. On November 1955, patent '172 issued on application B with the method claims here in suit.

THE CLAIMS OF THE PATENTS IN SUIT.

Patent No. 2,626,841 contains two claims relating to the old combination of a ball in a race ring and read as follows:

1. A self-aligning bearing construction involving inner and outer bearing members, said inner bearing member comprising a bearing ball having a spherical bearing surface and an axially disposed bore for receiving a shaft, a non-ferrous malleable metal single piece outer bearing race member having a spherical socket corresponding in shape to the spherical inner bearing member and having parallel radial end walls, *said outer race member being stressed such that the metal adjacent the inner peripheral surface area is compressed and the metal adjacent the outer peripheral surface is under a stress tension to form an unstretchable peripheral area, which, when subjected to a rolling pressure, will cause the metal adjacent the inner peripheral surface to expand the ends of said outer bearing member in a direction away from the axis of the self-aligning bearing.*

2. A self-aligning bearing construction involving inner and outer bearing members, said inner bearing member comprising a bearing ball having a spherical bearing surface, a malleable single piece outer bearing race member having a spherical socket corresponding in shape to the spherical inner bearing member,

said outer race member being stressed such that the metal adjacent the inner peripheral surface area is compressed and the metal adjacent the outer peripheral surface is tensioned.

The *matter in italics is not contained* in the application as filed nor in the specification of the patent as issued. There is serious doubt as to what these claims cover; in the file history [Exh. A, p. 26] Potter represented that “the claims *are not directed to a finished article of manufacture as such.*” Plaintiff’s expert contradicts this admission by stating that they *describe the finished product* and not its condition at intermediate stages of manufacture [R. 1060]. Plaintiff’s witnesses admitted that the ball-race assembly *does not have the unstretchable peripheral area* specified in claim 1 [R. 427, 683-4]. The claims are ambiguous, indefinite and void for failure to conform to the requirements of 35 U.S.C. 112.

Patent No. 2,724,172 contains seven claims directed to a “method” of making a bearing composed of a ball within a race. Claim 1 is typical and reads as follows:

1. The method of forming a self-aligning bearing having a bearing ball and a relatively soft, ductile metal bearing race, said ball and race being formed with corresponding curved surfaces therebetween, comprising:

assembling said ball in an annular blank having an inner cylindrical surface substantially correspond-

ing in diameter with that of the bearing ball and having opposite end portions.

compressing said end portions inwardly in intimate and direct contact with said ball to deform the cylindrical blank *and place the same under a stress with the outer periphery stretched and the inner periphery under compression* such that said blank will conform and produce a binding engagement around the curved surface of said ball,

and finally compressing the median portion of the bearing race by pressure applied through rolling contact *relieving some of the compression stress in the metal adjacent the inner periphery of said blank* and elongating the bearing race evenly towards its opposite ends and separating evenly the bearing surfaces between the bearing ball and bearing race by an amount sufficient to permit smooth rotation therebetween but still confine said ball within said race.

The matter in italics does not appear in the application as filed for the first patent No. 2,626,841; therefore patent No. 2,724,172 is not supported by the first application [Exh. A] and is not a division thereof. The file history of this second patent No. '172 [Exh. B, p. 30] specifically states that the claims "distinguish in a patentable sense over the disclosure in applicant's (first) patent." The claims of this second patent '172 are not supported by the specification (as filed) on the first patent. This second patent '172 is not entitled to the filing date of the first patent, does not conform to the requirements of 35 U.S.C. 120 and 112 and is invalid. The second patent '172 must stand on its filing date of December 16, 1952, and is **void by reason of commercial use** more than one year prior to December 16, 1952 [see Admissions R. 997]. Moreover, Potter made false oath to this applica-

tion for patent '172 [see p. 22 of Exh. B] by failing to state that the method had been in use prior to October 1951. The trial court disregarded the law by stating that the statutory requirements as to oath of applicant were not material [R. 1285].

Claims 3, 6 and 7 specifically refer to "coining." Claims 2, 5 and 9 specifically require that the end faces of the tubular ring blank be radially converging or of frusto-conical configuration. Claims 1 to 3 call for the use of a rolling pressure to loosen the ball, but Claims 4 to 7 broadly cover "compressing," this including application of force by hammering as well as its equivalent rolling pressure.

Defendant has never used tubular race blanks with inclined, converging end faces. Conclusion of Law V is wrong in stating that claim 2 was infringed.

ERRONEOUS FINDINGS AND CONCLUSIONS OF TRIAL COURT.

The trial court announced its decision from the bench, without written memorandum opinion. That a proper standard of invention was not applied is indicated by the following:

"Mr. Miketta: Has your Honor considered that any new result was created by Potter that wasn't created by Fiegel or obtained by Fiegel?

The Court: Yes.

Mr. Miketta: What is the new result?

The Court: Fiegel's invention was a three-piece invention, and this is a two-piece invention, and Fiegel's invention I do not think could be used, or his article of manufacture could not be used, as the witnesses have testified in this case these inventions are used.

Mr. Miketta: It is used as a bearing, your Honor. And there is nothing in the patent indicating loads.” [R. 1286.]

Plaintiff’s counsel prepared the findings; defendant’s objections were filed May 12, 1958 [R. 131]. The objections called attention to the fact that the findings did not identify the parties, did not state facts to permit the Court of Appeals to be informed as to the basis of conclusions reached, and did not cover the issues raised by the Pretrial Order. It was urged that the Findings did not conform to this Court’s requirements (*Paramount Pest Control Service v. Brewer et al.*, 170 F. 2d 553; *Schneiderman v. United States*, 320 U. S. 118, 129; and *Dalehite v. United States*, 346 U. S. 15). Specific errors were called to the trial court’s attention [R. 136-7]. However, the trial court signed the findings and conclusions on June 9, 1958 [R. 155-175].

Specific erroneous findings are enumerated in Point 5 of Statement of Points on Appeal [R. 176-179]. Questions of validity and infringement are presented by this appeal.

SPECIFICATION OF ERRORS RELIED UPON.

Defendant has set forth the errors committed by the trial court in its Concise Statement of Points on Appeal under Rule 17(6) [R. 176], and relies on said errors as if restated here. In furtherance of the argument as hereafter presented, the errors may be restated as follows:

1. The District Court erred in holding that both Potter patents embody invention over the prior art [Finding XXXIII, R. 166, Conclusion II, R. 172], in view of the rules and criteria of invention required by the Supreme Court and this Court of Appeals.

2. The District Court erred in considering a two-piece bearing to be a new concept [Finding XIX, R. 169], and in holding that the Potter patents resulted for the first time in permanent encasement of a ball in a race [Finding XXVI, R. 164] from which the ball cannot be removed without destruction of the race [Finding XIII, R. 168], in view of the prior patents which show such bearings.

3. The District Court erred in holding that matters of degree involved invention [Findings XIV, XVII, XXV, XXVIII, XXIX, XLII and LVII, R. 159-171], in view of

“It is firmly imbedded in patent law that change in form, proportion, or degree does not reflect patentable invention even though change produces better results.” *Berkeley Pump Co. v. Jacuzzi Bros., Inc.*, 214 F. 2d 785 (CA 9).

4. The District Court erred in holding that plaintiff used the methods and made bearings in accordance with the Potter patents and that commercial success takes the place of invention [Findings V, VI, XVIII, XLVII and XLVIII]

“Lack of novelty and lack of invention being clearly shown, no significance attaches to the fact, if it be a fact, that utility and commercial success followed.” *Grayson Heat Control Ltd. v. Los Angeles Gas Appliance*, 134 F. 2d 478, 481 (CCA 9).

5. The District Court erred in holding that defendant used the method of the '172 patent and produced bearings in accordance with the '841 patent [Findings XVIII, XXX, XXXV, XLV and LXI; Conclusions IV and V].

6. That the District Court erred in disregarding Chambers 2,382,773 and Exhibits N1, N2, AC1 and AC2 as operable examples of prior art [Finding XXII].

7. The District Court erred in holding that the claims of patent No. '172 are readable upon the disclosure of the application for patent No. '841 [Findings XLVIX, LIV and LX, R. 169; Conclusion of Law III, R. 172], in view of admissions of record and uncontrovertible statements in the file history.

8. The District Court erred in holding that the disclosures of patent No. '841 are adequate and that the claims thereof define an invention readable upon the original application [Findings XLVIX, L, LII, LVII and LIX].

9. The District Court erred in failing to find that the claims of the patents in suit fail to conform to the definiteness required by 35 U.S.C. §112; in failing to find that patent No. '172 is invalid on the grounds of prior public use and that plaintiff is estopped to assert this patent; and in failing to determine these issues in accordance with the Pretrial Order. The court erred in reaching Conclusion VIII without stating a basis therefor.

10. The trial court erred in making conflicting and irreconcilable findings and clearly erroneous findings which are contrary to the evidence.

11. The District Court erred in denying defendant's motion to strike testimony of plaintiff's purported expert Barish [R. 913-914]. The facts are as follows: Early in the trial, plaintiff's counsel stated that his expert witness would use pictures or photoelasticity [R. 224] and gave defendant a re-

duced copy of photographs, Exhs. 55, 56 and 57, with some explanatory material [R. 275].

Plaintiff's counsel stated that the photographs and a motion picture would be the only exhibits “* * * from which the expert witness will testify as to physical phenomena which they represented [R. 276].

The photographs and motion picture represented a plastic ring placed upon a shaft; when force was applied to the ring, light and dark bands of light in the ring allegedly represented location and intensity of stress. Barish testified at length on this subject on direct examination by plaintiff [R. 525-535] referring to the photographs Exhs. 55, 56 and 57 and a motion picture film. Exh. 28.

Upon cross-examination [R. 922, 923] Barish was asked to identify the fourth order fringe on Exh. 55, and could not do so.

“The Court: Do you know what is meant by the term ‘fourth order fringe’?

The Witness: I am not sure, sir. It is a terminology used by the expert in photo-elasticity. [927]

Q. (By Mr. Miketta): But you are not an expert in the subject?

A. I am not an expert in the subject of photo-elasticity. I use it as a tool.

Mr. Miketta: Well, may the court please, I move to strike all of the testimony with respect to Exhibits 55, 56 and 57, including the motion picture, on the admission of the witness that he is not an expert on the matters that he has been presenting to the court.

The Court: Motion denied.” [R. 913-914.]

It is submitted that the trial court erred in denying the motion to strike the testimony of a witness who was introduced and who posed as an expert but admitted he is not. This is a specific instance of over-reaching by Barish and indicative of the temper of the trial court.

12. The trial court erred in refusing to permit defendant's expert witness to state his opinion with respect to differences between defendant's operation and prior art disclosures. [Point on appeal 12, R. 179]. The facts are as follows: Professor L. V. Colwell, of University of Michigan, was testifying on direct examination by defendant, and had referred to prior patents and knowledge.

"Q. (By Mr. Miketta): From your study of the defendant's operations and the Chambers patent 2,382,773, do you have an opinion as to whether or not what is described in the Chambers patent, both in the form of dies and in the method of manufacturing a bearing, differs from what is employed by the defendant?

Mr. Lyon: I will object to that. If the question is does he have an opinion, of course I don't object; but if he gives the opinion, I object.

The Court: The objection is sustained. You stipulated that his statement may go in, this report of his, and throughout he keeps saying that what the plaintiff did here is similar to such-and-such a patent, and such-and-such a date, and it has been known since 1913.

I missed it by a few thousand years when I said you would probably testify that this was known at the time Moses.*

*Note: Another allusion to reversal of trial court in *Muench-Kreuzer Candle Co., Inc. v. Wilson*, 246 F. 2d 624 (C. A. 9).

Mr. Miketta: I don't think we can go back that far on this witness' personal experience, your Honor. But I have asked him, your Honor, if he had an opinion [617].

The Court: It is a preliminary question, and your next question is what is his opinion.

Mr. Miketta: That's right.

The Court: So let's stop it here. I will sustain the objection." [R. 667.]

The subject of this specific question had not been previously covered. Please note that grounds for plaintiff's objection were not stated. The antagonistic temper of the trial court was again evidenced.

QUESTIONS PRESENTED.

The points on appeal [R. 176] enumerate in detail each of the errors committed by the trial court. These points on appeal may be condensed into six questions for determination by this court:

1. As a matter of law, did the trial court apply the correct criteria and standard of **invention** required by the Constitution and established by the rulings of the Supreme Court and this court?

(It is urged that this must be answered in the negative and that both Potter patents be held invalid and not infringed. This question encompasses Points on Appeal, 1 subs. (a), (b), (c); Point 2, subs. (a), (b); Points 7, 8, 9 and 10. Specific erroneous Findings are IV to VIII, XVII, XVIII, XIX, XXIII, XXIV, XXV, XXVI, XXVIII, XXIX, XXXIII, XLII, XLIII and LVIII.)

2. Did the trial court commit error in failing to find that the Potter patents had been issued in viola-

tion of statutory requirements that no new matter be added, that proper oath was not made, that the claims fail to define with necessary definiteness, that prior commercial use is a bar, that the second patent is not a true division of the first application, that the method was abandoned, etc.?

(The only possible answer is that error was committed. These errors are embraced by Points on Appeal, 1 subs. (d) and (e); Point 2, subs. (c) to (g); Point 10. Specific erroneous findings are VIII, XXXV, XLIX, L, LIV, LV, LVI, LIX, LX and LXI.)

3. Did the court make conflicting and erroneous findings of fact?

(It is urged that the court made findings that are contrary to the evidence and the judgment must be reversed. This question embraces Points 3, 4, 5 and 6. Specific erroneous findings are enumerated in Point 5 on appeal.)

4. Does defendant infringe by making a bearing in which the entire inner surface of the race is not in intimate and direct contact with the ball?

(There can be no infringement since a thickness gauge can be inserted into every bearing made by defendant. This conclusively proves that there is no such intimate and direct contact. Moreover, tight bearings were made by the prior art.)

5. Did the trial court err in denying defendant's motion to strike certain testimony of Barish and in refusing to permit defendant's expert to state his opinion. (Points on Appeal 11 and 12, discussed in detail on pages 16-18 of this brief.)

6. Should costs be assessed against plaintiff on this appeal for burdening this record with unnecessary material?

(Defendant designated a condensed version of the record; plaintiff added all of the record and defendant moved to strike. Your Honors denied the motion without prejudice September 30, 1958.)

The judgment of the trial court must be reversed if the answer to any one of the first four questions indicates error by the trial court.

PRIOR ART AND PRIOR KNOWLEDGE.

The Potter patents will have to be considered in the light of prior knowledge since

“Patents cannot be sustained when * * * their effect is to subtract from former resources freely available to skilled artisans.” *A. & P. Tea Co. v. Supermarket Corp.*, 340 U. S. 147, 152 (quoted in *Gratiot et al. v. Farr Company*, 237 F. 2d 940, where-in this Court reversed the trial court and held the patent invalid.)

Before discussing the Potter patents in suit, a brief review of prior knowledge as established by documents and uncontroverted evidence appears desirable.

“In determining whether there is invention, everything previously known to the art through patents, publications or use must be taken into consideration.” *Hall et al. v. Wright et al.*, 240 F. 2d 789 (CA 9).

A bearing is a device to support a rotating element with minimum frictional resistance. A lubricant between the rotating elements converts the frictional resistance between metal surfaces into a shear resistance of the oil

film. Bearings may vary from a simple cylindrical sleeve or bushing to ball bearings, thrust bearings, self-aligning bearings, etc. Self-aligning bearings were formerly called ball and socket joints [Fiegel patent No. 1,693,748, Exh. D, R. 1368]. These were all old long prior to the filing of the patents in suit (see "Bearings" and "Lubrication" in Encyclopedia Britannica, 14th Edition, 1929). All of us have owned bicycles and automobiles and personally know that you can tighten a bearing to such an extent that it turns with difficulty or it can be so loose as to be sloppy and inefficient. Clearance is a matter of degree; it is not an "invention." Similarly, any mechanic knows that metals differ in strength and physical characteristics and one selects a metal in accordance with the loads to be carried. Selection of a metal is not invention. To aid the court and condense the material in Exh. D, appended Chart II illustrates prior art devices and quotes from prior patents included in defendant's Exh. D. It is clearly established that

1. Potter was not the first form metal around a ball.

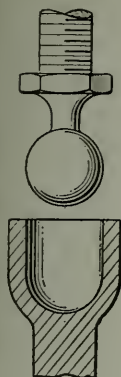
"Mr. Lyon: No, there are people who compressed around balls before, yes." [R. 199.]

2. Potter was not the first to form a cylinder into a race around a ball to make a bearing. [Erickson 1,481,000, Fig. 8, R. 1364; Fiegel 1,693,748, Figs. 7 and 8, R. 1368; Skillman 1,793,874, Figs. 4 and 5, R. 1371; Taylor 2,382,349, R. 1402; and Chambers 2,382,773, R. 1406].

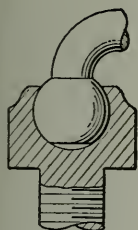
3. Any skilled mechanic (as of 1944) could make a die to bend or form a ring around a ball, and this was common practice in the industry.

"Q. On the basis of the same background of experience, will you state whether it was known prior to 1944 that an (518) outer metallic object having

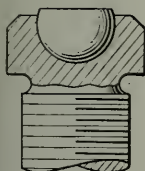
Chart II



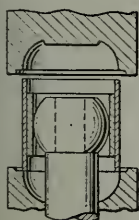
Self-aligning bearings. May be in form
line 16]. Spherical member 9 is placed
ring is coined around 9 "to completely and
Birchwood the inner surface of sleeve 5 to the spherical
mecha member 9" [p. 2, line 35]. Tapping of
and scosen is within skill of a mechanic [R. 1132].
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24,172. Self-aligning bearing. One-piece
ed around ball 1 and formed by dies around
Hoern the “inner surface thereof is complementary
a cup the ball” [col. 4, line 66]. To prevent ball
“an e too tight, covered the ball with coating of
of w ing the race.
canno
outer
bearin



Relates to an "efficient method for freeing line 5]. Recognizes that ball is "tightly 2 42] in many newly made bearings. Teaches *Skillman* bearing with an air hammer whose move- tubing controlled as it determines the amount of ber aiven to the bearing" [col. 3, line 33]. "The outer t is thus made uniform throughout" [col. 74, 11e exactness of fit is maintained in all re- inner ball and its race [col. 3, line 51].

film. Bearings may vary from a simple cylindrical sleeve or bushing to ball bearings, thrust bearings, self-aligning bearings, etc. Self-aligning bearings were formerly called ball and socket joints [Fiegel patent No. 1,693,748, Exh. D, R. 1368]. These were all old long prior to the filing of the patents in suit (see "Bearings" and "Lubrication" in Encyclopedia Britannica, 14th Edition, 1929). All of us have owned bicycles and automobiles and personally know that you can tighten a bearing to such an extent that it turns with difficulty or it can be so loose as to be sloppy and inefficient. Clearance is a matter of degree; it is not an "invention." Similarly, any mechanic knows that metals differ in strength and physical characteristics and one selects a metal in accordance with the loads to be carried. Selection of a metal is not invention. To aid the court and condense the material in Exh. D, appended Chart II illustrates prior art devices and quotes from prior patents included in defendant's Exh. D. It is clearly established that

1. Potter was not the first form metal around a ball.

"Mr. Lyon: No, there are people who compressed around balls before, yes." [R. 199.]

2. Potter was not the first to form a cylinder into a race around a ball to make a bearing. [Erickson 1,481,000, Fig. 8, R. 1364; Fiegel 1,693,748, Figs. 7 and 8, R. 1368; Skillman 1,793,874, Figs. 4 and 5, R. 1371; Taylor 2,382,349, R. 1402; and Chambers 2,382,773, R. 1406].

3. Any skilled mechanic (as of 1944) could make a die to bend or form a ring around a ball, and this was common practice in the industry.

"Q. On the basis of the same background of experience, will you state whether it was known prior to 1944 that an (518) outer metallic object having



Birchwood No. 1,050,422. Relates to couplings for connecting mechanical elements without lost motion. Ball is placed in socket and socket compressed about the ball "in a press of ordinary construction" [p. 2, line 15] so that "the socket fits snugly around the ball thereby eliminating all lost motion" [p. 3, line 18]. Recognized that tension and compression stresses were generated [p. 3, line 5].



Porter No. 1,123,796. A ball and socket joint "in which the parts move freely at all angles" [p. 1, line 12]. The "side walls of the socket are initially formed substantially parallel to receive the ball and are then turned or swaged over against the ball to form the annular seat to conform to the contour of the ball itself" [p. 1, line 98].



Hoern No. 1,798,738. Relates to rod ends [p. 1, line 3]. Used a cup die and coined metal around the ball [R. 1103] to form "an exactly fitting hemispherical socket, the ball-contacting walls of which are glass-smooth and polished" [p. 2, line 73]. Ball cannot be rotated [p. 1, line 25]. Loosens ball by hammering outer member [p. 2, line 127; R. 1105] to expand metal "in bearing contact with the embedded ball" [p. 3, line 101].



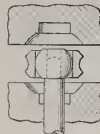
Skillman No. 1,793,874. Self-aligning bearing. Cylindrical metallic tubing [p. 1, line 98] is placed around spherical bearing member and upper and lower dies are brought together to form outer tubing into "substantially spherical shape" [p. 2, lines 30, 74, 125] and "to compress and shape the bushing around the inner non-cylindrical member" [p. 3, line 104].



Taylor No. 2,382,349. Self-aligning bearings. May be in form of rod ends [p. 1, line 16]. Spherical member 9 is placed within ring 5 and ring is coined around 9 "to completely and accurately conform the inner surface of sleeve 5 to the spherical surface of the former member 9" [p. 2, line 35]. Tapping of outside of ring to loosen is within skill of a mechanic [R. 1132].



Chambers No. 2,382,773. Self-aligning bearing. Ball 10a placed within outer member and "suitable dies" [p. 1, line 20] are forced toward each other to form portions 20a into a "spherical bearing surface" "complementary" to the surface of the ball [also see p. 1, line 39].



Spangenberg No. 2,724,172. Self-aligning bearing. One-piece outer race 3 is placed around ball 1 and formed by dies around the ball so that the "inner surface thereof is complementary to the periphery of the ball" [col. 4, line 66]. To prevent ball from being held too tight, covered the ball with coating of grease before forming the race.



Heim No. 2,476,728. Relates to an "efficient method for freeing bearings" [col. 1, line 5]. Recognizes that ball is "tightly gripped" [col. 1, line 42] in many newly made bearings. Teaches hitting outer ring of bearing with an air hammer whose movement "is carefully controlled as it determines the amount of looseness which is given to the bearing" [col. 3, line 33]. "The loosening of contact is thus made uniform throughout" [col. 3, line 45] and "the exactness of fit is maintained in all respects" between the ball and its race [col. 3, line 51].



a cylindrical inner wall could be formed around a ball to produce a self-aligning bearing? A. Yes, that sort of thing has been done in great quantity in the automotive industry in the early days. That is certainly in that period subsequent to about 1920, or World War 1" [R. 598].

"Q. Professor Colwell, in your opinion as of 1944 would any skilled mechanic or toolmaker or shop foreman, upon being asked to form a metal ring around a ball, have any difficulty in making a die which would form the ring around the ball to retain the ball? A. No, he would not" [(615) R. 665-6].

4. Potter did not invent dies for forming cylindrical metal into contact with a ball. [Birchwood—"a press of ordinary construction" R. 1345]; Fiegel; Skillman's "suitable dies"; Taylor's "coin press"; Chambers' "suitable dies."

5. Potter was not the first to describe a bearing where the ball is in sliding contact with a single continuous piece of metal as the race [Fiegel 1,693,748, R. 1368; Paulus 2,252,351, R. 1397; Taylor 2,382,349, R. 1402; Chambers 2,382,773, Figs. 2 and 3, R. 1406].

6. "That Lee R. Potter was not the first to invent or discover that when a bar of metallic material is bent into semi-circular form, portions of such bent bar adjacent the concave surface will be under compression and portions of the bent metal bar adjacent the convex surface will be under tension" [Admission 34, R. 998].

7. Potter was not the first to make a tight bearing and then loosen it by applying force such as a hammer blow to the outer race [Best shown and described by Heim 2,476,728, R. 1419; also see Hoern 1,798,738, R. 1376; Townsend 2,335,710, R. 1400; and Offutt 1,100,695, R.

1353]. With respect to Paulus 2,252,351 [R. 1397], plaintiff's expert testified:

"Q. So here we have a ball and a socket joint where (1123) you start off with direct and intimate contact between the outer member and the ball, followed by the application of force which loosens that ball from the socket walls for freely swiveling therein, is that correct? A. You are quoting correctly" [R. 1067].

8. Birchwood, patent 1,050,422 [R. 1345] and Fiegel patent 1,693,748 [R. 1368] show two-piece bearings, *i.e.*, a central ball and an outer race [R. 610]. Such bearings could be tight.

"Q. And during the manufacturing process of this Fiegel bearing the ball initially could have been held so tight within the ring as to require some loosening in some way? A. Yes, for certain applications.

Q. And in the event someone manufactured this Fiegel bearing and it turned out to be, let us say, held against (542) rotation, have you any opinion as to whether or not an ordinary mechanic or tool-maker would know how to liberate it? A. Oh, yes.

Q. What would he do? A. By hammering or rolling. If it were a single ball, he will pick up a ball-peen hammer and tap it. That would loosen it up.

For a production process it would depend upon the structures as to the tooling that would be the fastest and that in all probability would be rolling in this case" [R. 617].

Hammering or rolling in order to loosen are common expedients, known to mechanics long before 1944 [R. 681, 675, 679, 957-958].

Heim patent 2,476,728 [R. 1419] specifically refers to making a tight bearing and then hammering to produce a uniform clearance.

Skilled mechanics have the right to use all of this prior knowledge; the patents in suit cannot be sustained because "their effect is to subtract from former resources freely available to skilled artisans." (*A & P Tea Co. v. Supermarket Corp.*, *supra*.)

This background of prior art was not considered by the Patent Office in granting the Potter patents in suit. Admissions 35 and 36 list patents which were *not cited* [R. 93]. The Potter patents were issued with the "customary magnanimity" of a Patent Office which does not know the actual practices in the industry. (*Grindle v. Welch*, 146 Fed. Supp. 44 (D. C. N. Calif.).)

Any presumption of validity is overcome.

"The presumption of validity which attends the issuance of Letters Patent by the Patent Office is overcome in this case by the clear evidence of anticipation in the prior art which was not cited or considered by the Patent Office when the application for appellant's patent was passed on. See *Elliott & Co. v. Youngstown Car Mfg. Co.*, 181 Fed. 345 (C.C.A. 3); *American Soda Fountain Co. et al v. Sample*, 130 Fed. 145 (C.C.A. 3)."

Mettler v. Peabody Engineering Corporation, et al.,
77 F. 2d 56 (CA 9).

See also:

McClintock v. Gleason et al., 94 F. 2d 115 (CA 9);

Stoody Co. v. Mills Alloys Inc., 67 F. 2d 807
(CA 9);

Market Soda Fountain Co. v. Sample, 130 Fed. 145
(CA 9).

SUMMARY OF ARGUMENT.

The trial court made the erroneous and totally unsupported Finding XXXIII:

“That Potter Letters Patent Nos. 2,626,841 and 2,724,172 in suit and each of the claims thereof embody invention over the prior patents and bearings relied upon by the defendant.”

It is notable that the court did not make any specific findings concerning the matters disclosed and taught by each of the prior art patents such as Birchwood, Skillman, Fiegel, Hoern, Taylor, Heim, etc. The trial court failed to make findings as to prior knowledge. **The trial court failed to make a specific finding that the old combination of a ball with a race around it produced any new or different result.** Such findings would be necessary to uphold the patents. (*Bergman et al. v. Aluminum Lock Shingle Corp. of America*, 251 F. 2d 801 (CA 9).)

This Court of Appeals cannot tell from the findings just how the court came to the conclusions stated in Finding XXXIII. However, the physical exhibits of bearings, the printed copies of prior art patents and the certified file histories of the patents in suit speak for themselves. They show on their face that what is claimed by Potter in his patents is within normal mechanical skill.

The two patents in suit are invalid on two broad grounds:

1. They are invalid on the factual ground of lack of invention since

“* * * the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” (35 USC §103.)

2. They are invalid on statutory grounds; they are invalid because the subject matter fails to patentably distinguish from prior knowledge (35 USC §103), because the claims of '841 are not supported by the specification as filed (35 USC 112), because new matter was improperly added and was not supported by oath of applicant (35 USC §115 and §132), because the method of the second patent '172 was in commercial use more than one year before the application for patent '172 was filed (35 USC §102(b)) and because the patentee Potter had abandoned all claims to the method when he abandoned his "divisional" application [Exh. C—see Chart I]. There was no excuse for the 15 month abandonment.

"The rationale of these cases is that if the inventor, intentionally or by reason of culpable neglect, be guilty of action which unduly postpones the time when the public would be entitled to the free use of the invention, and thus defeats the policy of the patent law, the right to a patent will be lost." *Wirebounds Patents Co. v. Saranac*, 65 F. 2d 904 (CCA 6).

These statutory grounds upon which both patents should be held invalid are discussed in this brief at pages 43 to 55.

Invalidity for lack of invention over the prior art is based upon uncontroverted facts. Plaintiff does not and cannot claim novelty in the ball nor in an encircling race ring; these are old elements. The combination of a ball within a race ring is also old; Figs. 7 and 8 of expired Fiegel patent 1,693,748 cannot be disregarded.

The use of a press and dies to form a tubular member into a race around a ball is also old. Fiegel showed one type of press but even plaintiff's expert admitted that it

would not take more than normal skill to use a different type of die [R. 1114]. Other forms of dies, some almost identical to those illustrated in the Potter patents, are shown in Erickson 1,481,000, Fig. 8 [R. 1364], Skillman 1,793,874, Fig. 5 [R. 1371], Taylor 2,382,349 [R. 1402] and Chambers 2,382,773 [R. 1406].

The '841 patent does not and cannot cover the combination of a ball with a formed race ring around it. The claims of '841 cannot cover what Potter cancelled and withdrew from his application.

Plaintiff has caused the trial court to become confused by talking about things which the patents in suit do not disclose. Plaintiff and its so-called expert Barish represented to the trial court:

a. That the patents in suit are limited to heavy duty bearings [R. 566]. The patents do not define heavy duty bearings.

b. That the patents are directed to airplane bearings; that is wrong.

“Q. In neither of these Potter patents does it mention airplanes or airplane bearings, does it?

A. No, sir.” [R. 933.]

c. That it is essential to the Potter patents to coin the entire inner surface of the race into direct and intimate contact with the ball and then hammer the race loose [R. 898-99, 900]. “The important point is that the operation produces an intimate contact over the entire surface and requires large forces.” [R. 524.]

This is not stated in the patents. Moreover, neither plaintiff nor defendant obtains this direct contact. See R. 1061 and 1062.

d. Stress pattern.

"A. The stress pattern which is of value and which Potter invented is to have a compressive stress on the inner surface of the ring, not just anywhere or in any special part of it, but in all of it, and tensile strength on the outer surface on all of it." [R. 929.]

But this is not in the specification of the Potter patents.

"Q. * * *

Now, will you please look at the first Potter patent '841, the specification or descriptive part, and point out wherein in that specification there is a description of this necessary stress pattern that you have referred to?

A. I don't believe it is referred to explicitly.

Q. Does the specification of that patent anywhere discuss or measure or define the variables that you have mentioned, namely, the relationship between width and thickness and physical characteristics and radius of ball to the thickness which affects the presence and magnitude of this pattern?

A. Your question is, does the patent expound these differences?

Q. Yes.

A. The answer is no.

Q. Does the specifications describe them?

A. No." [R. 932.]

e. That Potter patents produce and require a uniform and small clearance between the entire surface of the race and the ball [R. 905]. However, clearance is a matter of degree.

"Q. And whether a clearance is appreciable or whether it is normal is simply a matter of

degree, depending upon what you were after, is that correct?

A. Yes, sir." [R. 893.]

f. That uniform clearance is proven by the fact that bearings are sold [R. 906]. This is a ridiculous assertion, but it appeared to influence the trial court.

The false issues enumerated above, as well as a lot of testimony about specifications and approval [which the witnesses never saw, R. 542, 543] and rash statements which were not based upon tests or measurements [R. 547] must be disregarded.

The facts prove

1. That tight bearings had been made in the past and then loosened to get a uniform clearance by hammering.
2. Patent '172 is invalid because it does not disclose invention; it simply states what any mechanic would normally do in making an old bearing.
3. Every bearing performs exactly the same function—it reduces frictional resistance.
4. Any alleged benefits attributed to the patents in suit spring from the imagination of plaintiff's counsel and are not traceable to any definite teaching in the patents.

NO INVENTION IN CLAIMS OF PATENT '841.

"The standard of patentability is a constitutional standard; and the question of validity of a patent is a question of law."

A. & P. Tea Co. v. Supermarket, 340 U. S. 147 at 155 quoted and followed in *Bergman et al. v. Aluminum Lock Shingle Corporation of America*, 251 F. 2d 801 (CA 9).

It is submitted that the Trial Court did not apply the required rules of law. Public policy requires that patents be held invalid when they do not involve invention in order to protect the public from burdens imposed by over-reaching patent owners.

"It is the public interest which is dominant in the patent system."

Mercoïd Corporation v. Mid-Continent Investment Co., 320 U. S. 661, 665.

Also see:

Haughey v. Lee, 151 U. S. 282, 285.

This court does not have before it detailed findings which clearly set forth the reasons for the trial courts' erroneous conclusions. **No finding states what (if any) new additional or different function is performed by the ball and race** (this requirement is referred to in *Kwikset Locks Inc. v. Hillgren*, 210 F. 2d 483 (CA 9), and in *Bergman v. Aluminum Lock Shingle Corp.*, 251 F. 2d 801 (CA 9). But the patents in suit, their certified file histories, the prior art patents, physical exhibits and uncontroverted admissions readily permit the court to determine whether the trial court failed to apply the standards of patentability and invention required by law.

The claims of a patent define the purported invention. What is the invention? This can be pinpointed by comparing claims cancelled from the application of '841 [Exh. A] with prior art and with claims issued in '841. What was cancelled and withdrawn and what is in the prior art is not invention:

“It is a well-known rule of patent construction that a claim in a patent must be read and interpreted with reference to claims which have been rejected. Claims which have been allowed cannot, by construction, be read to cover what has thus been eliminated from the patent. *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U. S. 211, 85 L. Ed. 132, 61 S. Ct. 235, 47 USPQ 345, rehearing denied, 312 U. S. 654, 714, 85 L. Ed. 1143, 1144, 61 S. Ct. 727, 728.”

Hall et al. v. Wright et al., 240 F. 2d 787 (CA 9).

The appended sheet compares Claim 1 from Exh. A, rejected and withdrawn, with the prior Fiegel patent (not cited by the Patent Office) and with Claim 1 of patent '841.

A horizontal comparison of abandoned and cancelled claim with each reference to Fiegel, demonstrates that Fiegel describes the **same bearing, made of the same elements** (a ball and a race) in the **same relationship**, for the **same purpose**. The race rotatably confines the ball. The abandoned and cancelled claim did not involve invention. It is evident that the combination of a ball with a race is not the alleged invention; the combination stated in the cancelled claim is admittedly in the public domain.

When Fiegel is now compared with issued claim 1 of patent '841, we again find the **same ball**, the **same race**, the **same relationship** for the **same purpose**. It is

Claim 1 of Patent '841

From

F

A self-aligning bearing construction involving inner and outer members

a bearing ball having an inner member comprising a bearing ball having an axially disposed bore for receiving a shaft and an axially disposed race member comprising a bearing ball having an axially disposed bore for receiving a shaft

and a bearing race member having a raceway spherical socket corresponding in shape to the spherical surface of the inner bearing member

the bearing race member having a raceway spherical socket corresponding in shape to the spherical surface of the inner bearing member

said bearing race member having parallel radial end walls

the race member being stressed such that the metal adjacent the inner peripheral surface area is under a stress tension to form an expandable peripheral area which, when subjected to bearing pressure, will cause the metal adjacent the inner peripheral surface to expand the ends of the bearing member in a direction away from the self-aligning bearing.

The claims of a patent define the purported invention. What is the invention? This can be pinpointed by comparing claims cancelled from the application of '841 [Exh. A] with prior art and with claims issued in '841. What was cancelled and withdrawn and what is in the prior art is not invention:

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Claim Cancelled

From Application [Ex. A]
For Patent '841

A self-aligning bearing, comprising,

a bearing ball having a spherical bearing surface
and an axially disposed work piece receiving bore

and a bearing race

having a raceway therein corresponding with the
spherical surface of said bearing ball to freely
journal the bearing ball in said raceway

said bearing race being of single piece construction.

Uncited Fiegel Patent

1,693,748, Fig. 8 [R. 1368]

Ball and socket joint or bearing
[see R. 1369, line 83]

A ball 16
[line 45]

Axial bore 17
[line 47]

Babbit 14 is non-ferrous and forms a continuous metal
race around the ball and in contact therewith [R. 1111]

See Fig. 8 and lines 72-75

No basis in Specification;
Admission 37, R. 1000

New Matter: Added in 1950
Contrary to 35 USC 132

Not supported by Oath
as required by 35 USC 111 and 115

Stresses not invented by Potter
Admission 34, R. 998

"Unstretchable" denied by Plaintiff

Issued Claim 1 of Patent '841

A self-aligning bearing construction involving inner and
outer bearing members

said inner member comprising a bearing ball having
a spherical bearing surface

and an axially disposed bore for receiving a shaft
a non-ferrous malleable metal single piece outer
bearing race member

having a spherical socket corresponding in shape to
the spherical inner bearing member

and having parallel radial end walls

*said outer race member being stressed such that the
metal adjacent the inner peripheral surface area is
compressed and the metal adjacent the outer peri-
pheral surface is under a stress tension to form an
unstretchable peripheral area which, when subjected
to a rolling pressure, will cause the metal adjacent
the inner peripheral surface to expand the ends of
said outer bearing member in a direction away from
the axis of the self-aligning bearing.*



only common sense to make a race or socket which corresponds in shape to the inner ball. Birchwood [Patent No. 1,050,422 of 1913, R. 1349 stated that his "socket fits snugly around the ball." Each and every physical element of this claim is old. No invention can be found so far. No additional elements are recited thereafter.

Specific attention is now drawn to the latter part of claim 1 of patent '841 in italics. This hodgepodge of words, put in by an amendment filed March 7, 1950 [see Exh. A, p. 15] five years after the application was originally filed, confused the Patent Office into allowing the claim. But there is no invention in this hodgepodge, because:

A. Potter did not invent stresses in compression and tension [Admission 34, R. 998]. Exh. Q shows that they are a natural result of any bending, and this was known long prior to 1944 [Professor Colwell, R. 598]. In 1913 Birchwood 1,050,422 recognized that tension and compression stresses were generated when he compressed his race socket around the ball [see R. 1349 (p. 3 of patent, lines 5-8)]. Plaintiff's own expert and advocate stated that such stresses are naturally generated whenever metal is bent [R. 932] and that prior patentees, such as Taylor 2,382,349 got the same stresses in their race rings [R. 1131].

B. The hodgepodge is actually **wrong and misleading**; plaintiff's president admitted that the race **ring does not have an unstretchable area** [R. 427] and this was confirmed by Professor Colwell [R. 683-4]. Invention cannot be predicated on a false statement.

C. The claim is further wrong, misleading and baseless because it talks about expanding the ends of the ring **away from the axis** whereas in Fig. 5 of the pat-

ent, the arrows are shown parallel to the axis, and the patent so stated (Col. 3, lines 48-49).

There is no invention in describing stresses which naturally occur, and which prior patentees generated automatically when they formed their race rings. If certain results inherently follow in bending, then these inherently obtain in the prior art as well as in Potter. The Court of Customs and Patent Appeals held:

“While it is true, as urged by appellant in his brief, that the prior art did not teach in detail, as has appellant, the redistribution of stresses in the several layers of multi-layer pressure vessel, we think that if the teachings of the prior art were followed, there would be a redistribution of stresses such as appellant claims to have discovered. *A patent should not be granted for appellant’s discovery of a result that would flow naturally from the teachings of the prior art.*”

In re Kepler, 132 F. 2d 130.

The rule has been stated by this court as follows:

“* * * Patentees are not entitled to a monopoly for the judicious use of materials the use of which would produce the result to be expected from such selection. *Recognition is not invention.* Continental Fibre Company v. Formica Insulation Company, 287 F. 455; Vitamin Technologists, Inc., a Corporation v. Wisconsin Alumni Research Foundation, 9 Cir., 136 F. (2d) 318; Aero Neck-Band & Collar Company v. Beaver Mfg. Co., 97 F. (2d) 363, 365.”

Kalich v. Paterson Pacific Parchment Co., 137 F. 2d 649 (CA 9).

The claims of the Potter patent attempt to claim old elements in an old combination for an old result, by simply adding a technical or scientific explanation for an old, naturally occurring compression-tension relationship. The giving of a scientific explanation is not invention and such claims are invalid.

General Electric Company v. Jewel Incandescent Lamp Co., 326 U. S. 242;

Davison Chemical Corp. v. Jolient Chemicals, Inc., 179 F. 2d 793 (CA 7), cert. den. 340 U. S. 816;

Springs Cotton Mills, Inc. v. Hall Laboratories, Inc., 208 F. 2d 500 (CA 4);

Pennsylvania Crusher Co. v. Bethlehem Steel Co., 97 F. Supp. 696.

In a leading case, the Supreme Court stated:

“Even if the asserted difference were established, it is *no more than the scientific explanation* of what Lilienfeld and others knew, before Langmuir, of the effect of the high vacuum on the discharge, and the methods and devices for procuring the vacuum. It is the method and device which may be patented and *not the scientific explanation* of their operation. See *LeRoy v. Tatham*, 14 How. 156, 174-6.”

DeForest Radio Co. v. General Electric Co., 283 U. S. 664 at 684-5.

In order to be invention, it must be evident that there is a contribution to prior knowledge. The contribution must be more than the sum of its parts; it must be more than the normal, expected skill of a mechanic. It is essential that the standards of invention established by the Constitution and the Supreme Court be followed and applied.

“By the Jacuzzi case, *supra*, and the cases upon which it rests, we are committed, and the trial courts of this Circuit are committed, to the rigid standards of invention of *Lincoln Engineering Co. v. Stewart-Warner Corp.* *supra*, and *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, *supra*; *Photochart v. Photo Patrol*, 9 Cir., 189 F. (2d) 625, Cert. den. 342 U. S. 867; *Jacuzzi Bros. Inc. v. Berkeley Pump Co.*, 9 Cir., 191 F. (2d) 632, 637; *Berkeley Pump Co. v. Jacuzzi Bros. Inc.*, 9 Cir., 214 F. (2d) 785; *Himes v. Chadwick*, 9 Cir., 199 F. (2d) 100; *Kwikset v. Hillgren*, 9 Cir., 199 F. (2d) 483, Cert. den. 347 U. S. 989.”

Moist Cold Refrigerator Co. v. Lou Johnson Co., 249 F. 2d 246 (CA 9);

Reiterated in *Oriental Foods Inc. v. ChunKing Sales Inc. et al.*, 244 F. 2d 909 (CA 9).

Please note that the metal of the race is said to be non-ferrous and malleable; this covers babbitt and brass; Fiegel spoke of babbitt, but certainly other metals can be used without exercise of invention. There is nothing in the claim specific to loads, thickness of metal, or clearances. All the claim requires is that the socket (or inner surface) of the race correspond in shape to the ball. That is not invention—you would not put a bearing ball into a square socket.

“The only change would be in the degree of curvature and it is well settled that such a thing does not rise to the level of invention.”

Johnson v. Henricks, 140 F. 2d 108 (CA 2).

Also note that the Fiegel bearing (or any other bearing) could come out of the forming press with a ball that was not completely free to rotate [R. 616]. The

degree of force used in forming the race influences the freeness of rotation of the ball [R. 621]. Professor Colwell's observations and tests clearly show that using regular production parts and presses, a race could be formed around a ball and be free when 17.7 tons of pressure were used, but the ball would be "frozen" or immovable when 21.6 tons or more was used [see Exh. L, R. 1443 and Chart on R. 1456]; patent '841 and its claims do not define the pressure to be used, and no invention can be based on a matter of degree.

There can be no invention in claiming (without definition of any sort) a variation in degree of fit or clearance.

"Merely changing Steiner's closeness of fit was but an obvious exercise of choice and manner of construction. This was nothing but a variable involving in application nothing more than any skilled workman would do as a matter of course to have the friction held parts cling together less firmly. So the well established principle that a change in degree only will not support a patent applies in full force."

Dykema v. Liggett Drug Co., Inc., 94 F. 2d 648 (CA 2).

It is urged that the claims of patent '841 are invalid for lack of invention. The facts bring this case squarely under the rule of law stated as follows:

"The mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention."

Lincoln Co. v. Stewart-Warner Corp., 303 U. S. 545, 549.

The trial court did not apply this rule of law, and committed reversible error. The '841 patent is invalid.

PATENT '841 INVALID ON STATUTORY GROUNDS.

In addition, this patent is invalid because the hodgepodge of words upon which plaintiff now relies is **not supported by the original application as filed**; these words were added by amendment which contravenes the specific requirement of 35 U.S.C. 132:

“No amendment shall introduce new matter into the disclosure of the invention.”

All this stress, strain, compression, tension business was put in by Potter's attorneys in March 1950 and July 1951 (five and six years after the original application was filed) [see Exh. A, pp. 15 and 24]. What the attorneys put in was **not Potter's invention and not under statutory oath** of applicant Potter.

“That statute requires that one shall swear to his invention, and all of it; if he only swears to a part, and his attorney puts in the rest, it is exactly like any other yielding to the temptation of improving an affidavit after execution, by inserting additional allegations of fact.”

Westinghouse Electric & Mfg. Co. v. Metropolitan Electric Mfg. Co., 290 Fed. 661 (CCA 2).

If “invention” can be found in the hodgepodge of new matter added by amendment in 1950, the patent is invalid because there is no oath by Potter to support such new matter; the requirements of 35 U.S.C. 111 and 115 have not been met. These statutory requirements cannot be

ignored. **The trial court ignored the law.** At the conclusion of the trial in referring to the amendment which added new matter

“Mr. Miketta: And which, your Honor, has never been supported by oath of Potter as required by statute.

The Court: I don’t think that is material.” [R. 1285.]

Such flagrant disregard of statutory requirements does not add stature to the courts of the United States.

“The inventor must comply with the conditions prescribed by law. If he fails to do this, he acquires no title, and his invention or discovery, no matter what it may be, is lost to him, and is henceforward no more his than if he had never been in any wise connected with it.”

Consolidated Fruit Jar Co. v. Wright, 94 U. S. at 96, 97.

Claim 2 of patent '841 is invalid for the same reasons as those stated above.

It is submitted that clearly evident error was committed. Patent '841 is invalid for lack of invention. It is also invalid in that statutory requirements have not been complied with. The specification as filed does not furnish a basis for the matter added by amendment five years later; the specification fails to describe the purported invention in the detail, clarity and exactness required by 35 U.S.C. 112; the new matter was added in contravention of 35 U.S.C. 132; the new matter was not supported by oath as required by 35 U.S.C. 111 and 115.

The trial court erred in making Finding XXXIII.

Finding LIX is also clearly wrong; it is contrary to Admission 37 [R. 1000] which establishes that the specification did not contain the later-added hodgepodge of words upon which plaintiff relies for invention.

As pointed out hereinabove with reference to the new matter added by amendment to the claims of patent '841, there is no invention in stresses and strains. Potter did not invent these stresses; that is uncontrovertibly established by Admission 34 [R. 998], Exh. Q and testimony of both parties. For this reason, all findings of fact which refer to such stresses in compression and tension must fall; Findings VII, XVII, XX, XXV, L, LII, LVII are erroneous since they are based upon a false premise.

PATENT '841 INVALID BECAUSE OF PRIOR USE.

To hold the claims of patent '841 valid requires complete disregard of law.

"The claims in question are invalid if there was public use, or sale, of the device which they are claimed to cover more than two years before the first **disclosure** thereof to the Patent Office * * *.

We think the conclusion is inescapable that there was public use, or sale, of devices embodying the asserted invention, more than two years before it was **first presented** to the Patent Office. * * *

We therefore hold that the claims in question are invalid * * *."

Muncie Gear Co. v. Outboard Co., 315 U. S. 759 at 768.

(NOTE: The two year period under old §4886 R. S. was changed to one year in 1939.)

The new matter was first disclosed to the Patent Office by amendment on March 7, 1950. Any prior use to March 1949 requires the patent to be held invalid since such use would be more than one year "before the first disclosure thereof to the Patent Office" as prescribed by the Supreme Court.

The record includes admissions and testimony that **there was prior use and sale** prior to October 1, 1951 [R. 996 and 997] and as early as 1945 and 1946 [R. 263, 266, 269, 270, 296, Exh. 25]. Plaintiff's president, Hackman, testified that the bearings so sold were identical to patent '841 [R. 423] and made pursuant to patent '172. These admissions, the rules of law and the statutes require the court to hold patent '841 invalid.

"* * * From the testimony of other witnesses, it seems well established that defendant built and sold machines which embodied all elements claimed in the patent more than a year prior to the effective filing date of the application. 35 U.S.C.A. §31. While Courts carefully scrutinize such testimony, nevertheless the public interest is involved and, if a device has been in the public domain, the exclusive privilege therein cannot be granted even to the inventor."

Schmeiser v. Thomasian, 227 F. 2d 875 (CA 9).

"When the defendant failed to patent his discovery within one year after the bag had been sold commercially, the wax impregnated cotton self-cooling water bag had been abandoned as a patentable device by either the inventor or anyone else; and the discovery had been dedicated to the public domain. *Dennis v. Pitner*, 106 F. (2d) 142, 150; *Elements of Patent Law*, Fred. H. Rhodes, 1949, p. 34."

H. Wenzel Tent & Duck Co. v. White Stag Mfg. Co., 199 F. 2d 740 (CA 9).

“Finally, it is argued that Steckel’s original application of June 30, 1923 does not form an adequate basis for the support of ’195 claims filed in the divisional application of May 23, 1928, and that by May 23, 1928, the mills and processes covered by the disclosure of ’195 had been in public use more than two years. If so, the claims are invalidated. *Muncie Gear Works, Inc. v. Outboard, Marine & Mfg. Co.*, 315 U. S. 759, 53 U.S.P.Q. 1.”

Cold Metal Process Co. v. Republic Steel Corp.,
233 F. 2d 828 (CA 6).

NO INVENTION IN PATENT ’172.

This second patent ’172 matured from an application, Exh. B, filed December 16, 1952, more than seven (7) years after the application for the first patent was filed. It is said to contain claims to a method of making the bearing described in the claims of the first patent ’841.

This application, Exh. B, was filed 15 months after a divisional application [Exh. C] with method claims was **abandoned** (see Chart I). Moreover, it was filed more than one (1) year after the method was admittedly commercially used; commercial use took place during 1946 to October 1951 [see Admissions, R. 996-7]. The second patent ’172 is invalid on the statutory ground of prior public use 35 U.S.C. 102(b) which states

“A person shall be entitled to a patent unless—
(b) the invention * * * was in public use or on sale in this country more than one year prior to the date of the application for patent in the United States.”

The purported method stated in patent ’172 consists in placing a tubular member around a ball, coining the tubular member around the ball to make a race out of it, and then hammering the outside of the race to loosen the ball within the race. **All of these steps have been previous-**

ly used in the bearing art. The result is a ball and socket or self-aligning bearing which cannot be distinguished from the bearings made by Fiegel in 1928.

It may be noted that in some of these bearings, the outer member or race may be provided with a shank or rod; such forms are now called rod-end bearings and are exemplified by Defs. Exhs. H, N-1, N-2, AC-1 and AC-2 (physical exhibits); Exh. AF, R. 1477, and the drawings of prior art patents such as Birchwood, R. 1345; Taylor 2,382,349, R. 1402; Chambers 2,382,773, R. 1406; and Heim 2,476,728, R. 1419.

Claim 4 of patent '172 is representative and is reproduced in extended form on the next page. The first few lines state that the finished bearing should have a ball and race "formed with corresponding curved surfaces therebetween." **That is not a new result.** Birchwood states that his "socket fits snugly around the ball" [R. 1349, lines 18-19] and prevents lost motion; plaintiff's expert admitted this is the **same functional result** as obtained by Potter [R. 1091]. Porter 1,123,796 forms "the annular seat to conform to the contour of the ball itself" [R. 1358, line 102]; Skillman 1,793,874 stamps a piece of cylindrical tubing into a "substantially spherical shape" [R. 1372, lines 34-42]; Hoern 1,798,738 [R. 1378] states that "The ball creates for itself an exactly fitting hemispherical socket, the ball-contacting walls of which are glass-smooth and polished" (p. 2, lines 73-76 of patent). Plaintiff's expert-advocate admitted [R. 898] that a "very intimate contact" between the race and the ball would be obtained by Taylor 2,382,349, and admitted [R. 1111] that the race of Fiegel would be in contact with the ball. Chambers 2,382,773 [R. 1407] states that inner bearing surface of his race "is formed complementary" to the surface of the ball.

In all these bearings the ball and race have corresponding or complementary surfaces. Different words can be used to say the same thing, but invention does not lie in semantics.

CLAIMS OF '172 DO NOT EMBODY INVENTION.

4. The method of forming a self-aligning bearing having a bearing ball and a relatively soft, ductile metal bearing race, said ball and race being formed with corresponding curved surfaces therebetween, comprising:

assembling said ball in an annular blank having an inner cylindrical surface substantially corresponding in diameter with that of the bearing ball and having opposite end portions

compressing said end portions inwardly in intimate and direct contact with said ball to deform the cylindrical blank *and place the same under a stress with the outer periphery stretched and the inner periphery under compression such that said blank* will conform and produce a binding engagement around the curved surface of said ball

and finally compressing the median portion of the bearing race by pressure applied radially inwardly thereto

relieving some of the compression stress in the metal adjacent the inner periphery of said blank and elongating the bearing race evenly towards its opposite ends and separating evenly the bearing surfaces between the bearing ball and bearing race by an amount sufficient to permit smooth rotation therebetween but still confine said ball within said race.

Object to be made is indistinguishable from Fiegel's bearing

This is shown in Taylor R. 1402 Fig. 3 & 4 and Chambers R. 1406 Fig. 2

This forming step is old in Taylor Chambers & Fiegel

Matter in italics is new matter; only a statement of inevitable natural results

Disclosed by Heim R. 1419. Hammering to loosen is common skill of the art. See R. 1132

Matter in italics is new matter; only a statement of normally expected result, not an invention

The second phrase of the claim states that the ball is placed within an outer blank having a cylindrical inner surface. This step is unmistakably shown in Taylor [R. 1402] Figs. 3 and 4, where ring 5 is placed around the ball portion 9 (or sphere whose end portions have been cut away to form end flats 10). In Chambers 2,382,773 [R. 1406] the ball 10a (Fig. 2) is put within the cylindrical bore of the outer race. There is no novelty in this step.

The third phrase of claim 4 speaks of compressing the end portions of the race ring against the ball. **There is no novelty in this step.** That is what Taylor does in patent 2,382,349, and even plaintiff's expert admitted [R. 1131] that there is "intimate and direct contact" between the race and the spherical inner member [R. 1019] in the Taylor method of forming by coining. There is no difference between "tightly engaging" and intimate and direct contact [R. 1058].

Please note that the words in *italics* (in claim 4) do not appear in the application [Exh. A for the first patent. These italicized phrases contribute *new matter*, which was not presented to the Patent Office in Exh. A until 1950, four years after commercial use.

The fourth phrase of claim 4 relates to the so-called loosening step by hammering the outside of the race (or by applying a rolling pressure). **Loosening by hammering an outer member is not invention.** Taylor made a tight two-piece assembly by coining.

"Q. Now, assuming that whoever was making this had also read the Heim patent, would it be beyond the skill of a skilled mechanic to hammer on the outside of that Taylor ring to liberate—that Taylor assembly—to liberate it?

A. Not, it would not." [Plaintiff's expert R. 1132.]

Hoern made his assembly by coining [R. 1103] and then loosened.

“Q. After the formation of this two-piece arrangement where you have this intimate and direct contact, and the ball is rigidly held, then you tap the outside and loosen it, is that correct?

A. Do you mean Hoern does?

Q. Hoern does, yes.

A. Yes.” [R. 1105.]

The Heim patent 2,476,728 [R. 1419] is specifically directed to an **“efficient method for freeing bearings”** (col. 1, line 5). This Heim patent was filed in 1942 [three years before Exh. A and ten years before Exh. B] and states that when a bearing is first made “the inner member is so tightly gripped” (col. 1, line 42) that the bearing is not practical. Heim is directed to the problem of loosening the fit “to exactly the desired degree.” Instead of hammering by hand as done by Hoern in 1931 (and still done by plaintiff), Heim describes hammering with an air hammer which “is carefully controlled as it determines the amount of looseness which is given to a bearing” (col. 3, lines 33-35). In this way “The loosening of contract is made uniform throughout” (col. 3, lines 45-46).

Therefore there is no invention in hammering in order to loosen a bearing. Hammering and rolling are alternative ways of applying pressure to cause loosening.

Townsend 2,335,710 [R. 1400] claimed “The method of stretching a bullet jacket or the loosening of a bullet jacket from its core by means of a machine having a rolling means acting on the surface of the bullet.” Paulus 2,480,043 [R. 1423] also used rolling pressure to loosen a bushing. Prof. Colwell, Mr. Straub and even the trial Judge had personal prior knowledge involving loosening by hammering and rolling.

OLD STEPS IN OLD SEQUENCE FOR OLD RESULT.

Each step in claim 4 is an old step. The steps have been used in combination or sequence in the prior bearing art. Each step in claim 4 produces the same result as in the prior art. No new function or result is obtained. There is no invention in claim 4. Finding XXXIII is erroneous. Conclusion of Law II is wrong.

The falsity of issues raised by plaintiff concerning heavy loads and clearances is emphasized by the lack of any such teachings in the claims. Note that the claim states that the race is of "soft, ductile metal." That applies to babbitt, die cast alloys, and brass. The "clearance" is said to be "an amount sufficient to permit smooth rotation." Does that teach anything that a mechanic did not know in 1940 or 1920?

"* * * The defect that we find in this judgment is that a standard of invention appears to have been used that is less exacting than that required where a combination is made up entirely of old components." *A & P Tea Co. v. Supermarket Corp.*, 340 U. S. 147 at 154.

Again attention is called to the matter *in italics* in claim 4 of patent '172. This matter *was not disclosed* in the application, Exh. A, filed in 1945. If invention is assumed to lie in this matter *in italics* then such invention was *not* disclosed in the application for patent '841 [Exh. A]; therefore the application for patent '172 is not entitled to the benefit of the 1945 date. Please note that 35 U.S.C. 120 requires that the invention be disclosed in the earlier application in the manner required by §112, namely the specification must be in full, clear, concise and exact terms. Here, the original application did not disclose stresses,

did not state that the outer periphery be stretched and the inner periphery be under compression, did not disclose relieving compression adjacent the inner periphery of the blank, etc.

Finding LX stating "The claims of the '172 patent find a basis in the original disclosure to the Patent Office on July 23, 1945" is clearly erroneous. Such finding is contrary to the documentary facts and contrary to Potter's representation to the Patent Office that the claims of application Exh. B (Pat. '172)

"* * * are believed to distinguish in a patentable sense over the *disclosure* in applicant's patent ('841)
* * *"[See Exh. B, p. 30].

In view of this admission and representation, Finding LIV is clearly erroneous. This finding contradicts the representation by holding

"The claims of the '172 patent are readable on the disclosure in the '841 patent."

Because patent '172 must stand on its December 16, 1952, date (as demonstrated hereinabove), such patent is invalid because of public use prior to October 1951. Commercial use of the method of patent '172 since 1945 was proved by plaintiff and its witnesses in great detail. Such prior use now invalidates this patent because of the provisions of 35 U.S.C. 102(b).

Also note that the application [Exh. B] for patent '172 was filed with **false oath** [p. 22 of Exh. B]. In this oath, signed December 5, 1952, Potter states that he "does not know and does not believe that this invention was even known or used * * * more than one year prior to **this** application * * *." Plaintiff's counsel prepared this oath; Potter signed it. Plaintiff's

counsel has also stipulated in this record that the method was used prior to October 1, 1951 [R. 996 and 997].

The remaining claims of patent '172 are invalid upon the same grounds as those advanced with regard to claim 4. It may be noted however that claims 2, 5 and 7 require that the end faces of the race blank be frusto-conical, *i.e.*, be inclined or "radially converging" as illustrated at 20D in Fig. 1. This particular form is not found in the prior art patents. Defendant does not use it. It is doubtful whether this minor change in form (from a normal, square ended form of tubing) can be said to rise to the dignity of invention.

The facts and the law require that the court find patent '172 invalid for lack of invention and void because of prior public use.

PATENT '172 INVALID ON GROUND OF PRIOR USE.

This statutory ground of invalidity and the authorities which compel this court to hold the patent invalid, have been reviewed hereinbefore in connection with patent '841, pages 38 to 42.

Even more compelling reasons exist with regard to patent '172 because the application [Exh. B] for this patent was not filed until December 16, 1952. For a period of **seven years** the purported invention was commercially employed **before the application was filed**. Such protracted delay is an obvious attempt to improperly and illegally extend the purported patent monopoly. It is certainly not in the public interest to have a patent owner impose a burden upon the public (which eventually has to pay) for more than the normal 17 year life of a valid patent. Here we have an invalid patent, lacking

invention, resulting from an application filed seven years after commercial use.

Actually, the method claims and invention were **abandoned** when application Exh. C was abandoned in June or October 1951. Plaintiff had the right to prosecute his appeal before the Patent Office in June 1951 but failed to do so.

This is not a case where the court is asked to weigh the credibility of witnesses; the documents themselves are before the court. Patent '172 must be held invalid as having issued in contravention of 35 U.S.C. 102(b), as well as invalid for lack of invention.

**NEITHER PLAINTIFF NOR DEFENDANT
MAKES BEARINGS PURSUANT TO PAT-
ENTS '841 AND '172.**

Finding XLVIII states that plaintiff's present production is in accordance with the patents in suit and Finding LXI states that defendant uses both patents. Conclusions of Law IV and V hold that defendant has infringed both patents. These findings and conclusions are contrary to facts and evidence.

Plaintiff's President and its expert-advocate Barish testified that it was **necessary and essential** for the entire inner surface of the race to be in direct and intimate contact with the ball after forming and before loosening [R. 415, 517, 524, 900, etc.]. Finding XX states that a "novel concept" of the patents is "that substantially all of adjacent surfaces of the ball and its race remain in direct and intimate engagement" after release of forming pressure.

Barish represented that during plaintiff's manufacture they took care in "obtaining an extremely intimate contact

between the ring and the inner spherical part at all points.” [R. 556.]

That was a bunch of malarkey. The trial court went to plaintiff’s plant and saw plaintiff make a BSSR-24000 bearing “Just as you manufacture them” [R. 806]. Plaintiff used 250 tons pressure. The court confirmed that a 0.002” thickness gauge could be inserted between the ball and the formed ring [R. 807]. So plaintiff made another one at the court’s request to “Make it as tight as you can” [R. 811]. Plaintiff used almost 300 tons pressure. When a .0015 guage was inserted between the ball and race the court commented **“It went in there quite a ways”** [R. 813]. A thicker 0.002 guage also went in.

This definitely proves that plaintiff does not get the intimate and direct contact between the entire inner surface of the race and the ball which is the “novel concept” and essential requirement of the patents in suit, as represented by plaintiff. Finding XLVIII is contrary to the observations of the trial court and is contrary to the physical exhibits before this court [see Exh. 64, for example]. Finding XVIII is also wrong for the same reasons.

The trial court also visited the defendant’s plant and observed production of rod end bearings for Sikorsky, the ball being freely rotatable after the race was formed [R. 830-832]. The trial court also observed the forming of an HSBH-20 bearing with an aluminum bronze race at 2000 lbs. pressure [Exh. W] where a 0.0025 guage could be inserted between the race and the ball [R. 835]. The trial court saw HSB6-20SA bearings with a heat-treated chrome-moly steel race formed at 2500 lbs. pressure and a .0025 feeler guage went in about 1/64th of an inch on one sample, and

“The Court: He did another one, and on the first operation he put in 2500 lbs. pressure, and it (the feeler gauge) goes in about a quarter of an inch.” [R. 839.]

That was the clearance between the inner surface of the race and the ball. Obviously the essential and necessary intimate and direct contact between the entire inner surface of the race and the ball did not exist.

The trial court erred in disregarding this uncontrovertible evidence and plaintiff's insistence that complete contact was essential and constituted the “novel concept” of the patents.

“Q. You consider that it is essential that there be intimate contact over the entire inner surface of the race with the ball, is that correct? A. Yes, sir.” [R. 900, Plfts. expert Barish.]

Therefore Finding LXI, “Defendant uses the steps covered by the claims of the '172 patent and produced bearings as claimed in the '841 patent, when it liberates after forming.” Is totally wrong and contrary to the facts of record. Conclusions IV and V are clearly wrong.

The Judgment erroneously holds that defendant infringed claim 2 of patent '172. This claim is specifically limited to the use of a race blank having the frusto-conical, radially converging ends. **Defendant does not use a race blank with such ends.** Defendant's race blanks have ends which are parallel and perpendicular to the axis, as shown in Exhs. F and G. This is shown by Prof. Colwell in Exh. L [R. 1439, 1442 and 1448], by Mr. Straub [R. 484] and observed by the court during plant inspection [R. 833].

Defendant does not infringe claim 2. There is no basis for such judgment.

OTHER ERRONEOUS FINDINGS.

Since plaintiff has convincingly demonstrated that it does not use the “novel concept” of the patents in suit, its business and alleged commercial success cannot be attributed to the patents in suit.

Findings V, VI, XX, XXVI, XXIX, XLII, XLIII, XLIV, L and LVII and each of them is in error.

PURPORTED COMMERCIAL SUCCESS IS NOT A SUBSTITUTE FOR INVENTION.

It appears that the trial court erred in considering commercial success to be a substitute for invention. After oral arguments, in referring to Potter and the patents in suit, the court stated

“He found a way to make a bearing for which there was great and immediate commercial success, and for which there is still a great demand in the industry, as indicated for instance by the defendant’s catalog and the list of interchangeability of bearings made by different companies.” [R. 1287.]

Although commercial success may be taken into consideration in determining a borderline case, the statutes and the Constitution require that a patent define an **invention** and that all of the statutory requirements be met before a patent is held valid.

“But commercial success without invention will not make patentability.”

Great A & P Tea Co. v. Supermarket Equipment Corp., 340 U. S. 147, 153, cited and followed in *Stauffer v. Slenderella Systems of Calif.*, 254 F. 2d 127 (CA 9).

“Evidence of commercial success cannot overcome clear lack of novelty and invention.”

Pevely Dairy Co. v. Borden Printing Co., 123 F. 2d 17 (CA 9).

To the same effect:

Fernandez v. Phillips, 136 F. 2d 404 (CA 9);

Grayson Heat Control Ltd. v. Los Angeles Gas Appliance Co., 134 F. 2d 478 (CA 9);

Rasmusson v. National Popsicle Corp., 111 F. 2d 453 (CA 9);

Bramlett v. National Unit Corp., 104 F. 2d 17 (CA 9);

Schick Service Inc. v. Jones, 173 F. 2d 969 (CA 9).

“Judge Conger found that the Magnus device created an industry, new in this country, of making harmonicas for the low price field, and that this industry enjoyed great commercial success.

These considerations, however, cannot spell out invention where there is none.”

Magnus Harmonica Corp. v. Lapin Products, Inc., 236 F. 2d 285 (CA 2).

It may be noted that there is **no actual evidence** in the record as to how many bearings were sold by plaintiff during the last 8 or 10 years in any one year, nor any evidence as to what was spent by plaintiff in advertising, circularizing the trade, sales promotion and entertainment, etc. The only testimony is that 40 or 50 preloaded bearings were “made” (but not sold?) during 1957 for North American Aviation [R. 447].

There is no actual and direct evidence of commercial success, and certainly there is clear evidence that plaintiff

does not manufacture in accordance with its own interpretation of the patents in suit.

It is submitted that Findings such as V, VI and XLII are clearly erroneous and improper.

CONCLUSION.

Whether a trial court has applied correct criteria of law to the evidential facts in making its findings of fact as to invention and validity

“* * * is reviewable on appeal as a matter of law.”

Noble Co. v. C. S. Johnson Co., 241 F. 2d 469 (CA 7).

The trial court did not apply the standards of invention written into the Constitution, expressed by the Supreme Court and applied by this Court.

Defendant has attempted, in this brief, to present the facts as concisely and as clearly as possible. When the claims of the patents are stripped of excess verbiage (improperly added five years after filing of the application and public use) what is left does not inventively distinguish from the prior art and prior knowledge. The claims lack invention. Paramount public interest compels finding the patents invalid for lack of invention—the skilled mechanic should be permitted to select materials, use his hammer in loosening objects and his skill in selecting the degree of clearance he wants in making a bearing.

The certified patent files of record clearly establish that statutory provisions regulating the issue of Letters Patent have not been complied with. The trial court erred in considering such provisions not material. The patents must be held invalid on statutory grounds.

Since neither plaintiff nor defendant use the alleged “novel concept” and essential element of the patents, no importance can be attributed to the patents. Plaintiff’s purported commercial success cannot be attributed to the patents and defendant cannot be said to infringe.

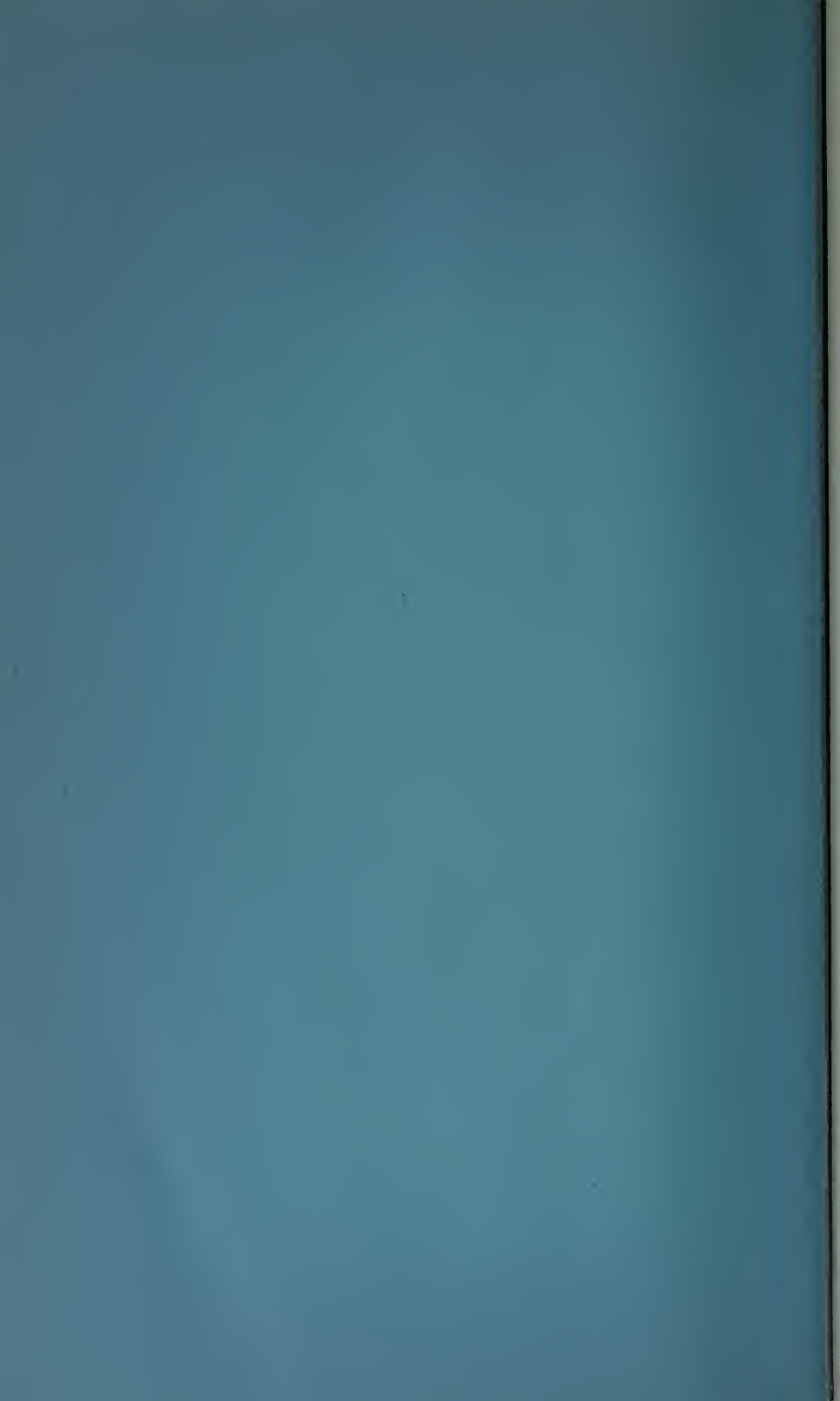
The judgment should be reversed and plaintiff awarded costs incurred on appeal.

Dated: This 15th day of April, 1959.

MIKETTA and GLENNY,

By C. A. MIKETTA,

Attorneys for Defendant-Appellant.



APPENDIX.

Pertinent Sections of Title 35, U. S. C.

§101. "Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, *subject to the conditions and requirements of this title.* * * *

§102. "Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or * * *

§103. "Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would

have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. * * *

§111. "Application for patent

Application for patent shall be made by the inventor, except as otherwise provided in this title, in writing to the Commissioner. Such application shall include: (1) a specification as prescribed by section 112 of this title; (2) a drawing as prescribed by section 113 of this title; and (3) an oath by the applicant as prescribed by section 115 of this title. * * *

§112. "Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. * * *

§115. "Oath of applicant

The applicant shall make oath that he believes himself to be the original and first inventor of the process, machine, manufacture, or composition of matter, or improvement thereof, for which he solicits a patent; * * *

§120. "Benefit of earlier filing date in the United States

An application for patent for an *invention disclosed* in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States by the same inventor shall have the same effect, *as to such invention*, as though filed on the date of the prior application, *if filed before* the patenting or *abandonment* of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application."

§132. "Notice of rejection; reexamination

"* * * No amendment shall introduce new matter into the disclosure of the invention."

§133. "Time for prosecuting application

Upon failure of the applicant to prosecute the application within six months after any action therein, of which notice has been given or mailed to the applicant, or within such shorter time, not less than thirty days, as fixed by the Commissioner in such action, the application shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner that such delay was unavoidable."

DEFENDANT'S EXHIBITS

Def's Exh.	Description	Page References in Record			Vol. IV
		Identified	Offered	Received	
A	Cert. File History - Pat. '841	203	203	203	
B	Cert. File History - Pat. '172	203	203	203	
C	Cert. File History - Abandoned Appln. Ser. No. 767,496	204	204	204	
D	Book of Prior Art Patents	205	205	205	1344-1425
E1-E4	Drawings Attached to Potter's Deposition	(206- (207	(206- (207		1426-1429
F	Drawing - Halfco Bearing Race Blank Dated: 11/16/51 O.K. 9/4/52	208	208	209	1430
G	Blueprint - Def's Race Ring - Dated: 12/20/54	209	209	209	1431
H	Def's Rod End Bearing: H-10	209	209	209	
I	Two-Piece Bearing: HSPG-10S	209	209	210	
J-1	Section of a Ring - Before Press Forming	210	211		
J-2	Section of a Ring - After Press Forming	210	211		1432-
K	Memo - Hackman 8/23/48	254	262	262	1435
L	Prof. Colwell's Report	587	648	648	1437-1450
L-1	Drawing - Kahr Process and Potter Process	690 691	691	691	1467
M-1	Pltf's Formed Bearing: BLR-3015	434	435	435	
M-2	Pltf's Formed Bearing: BLR-3015	434	435	435	
N-1	Rod End Bearing	461	468	468	
N-2	Rod End Bearing	461	468	468	
N-3	Ball and Shank	463	468	468	
N-4	Male Die Used For N-1 & N-2	470	470		
N-5	Male Die Used For N-1 & N-2	470	470		
O	Sketch by Tracey	461	461	461	1468
P	Copper Bar	595	690	690	
Q	Pages 81 & 82 - "Plastic Working in Presses"	597	690	690	1469-1470
R	Drawing by Prof. Colwell	628	690	690	
S	Drawing by Prof. Colwell - Diff in Coining & Bending	639	690	690	1471

Def's Exh.	Description	Page References in Record			
		Identified	Offered	Received	Vol. IV
	Drawing by Prof. Colwell - Spring Back	665	690	690	1472
	Sawed-Off Bearing Specimen	758	1153	1153	
-1	Ball and Shank - From Def's Plant	831	869	869	
-2	Completed Press - Formed Rod End	831	869	869	
V	Formed Bearing - Def's Plant	836	870	870	
-1	Tight Bearing - Def's Plant	839	870	870	
-2	Rolled Bearing - Def's Plant	840	870	870	
-1	Bearing - Four Punches	845	870	871	
-2	Bearing - One Punch	845	870	871	
	Drawing Illustrating Straub's Testimony	944	944	944	1473
A	Military Specification	920	943	943	
A-1	Military Specification	923	943	943	
B	Drawing Used by Straub	943	949	949	1474
C-1	Chamber-Type Bearings	954	954	956	
C-2	Chamber-Type Bearings	954	954	956	
E-1	Blueprint - Lockheed Bearing Assy.	959	964	971	1475
D-1	Bearing, O&S Bearing & Mfg. Co.	959	961		
D-2	Catalog, O&S Bearing & Mfg. Co.	959	961		
E-2	Blueprint - Lockheed Bearing Assy.	971	972	973	1476
F	Blueprint - Boeing Bearing Rod End	974	974	974	1477
G	Spherical Self-Align. Bearing	977	994	995	1478
H	Blueprint - Def's Bearing Assy.	981	981	981	1479
	Empty Race	993	993	993	
	Bearing - KSSB-12-5 (Thin Walled)	1147	1147	1147	

PLAINTIFF'S EXHIBITS

Description	<u>Page References in Record</u>			
	Identified	Offered	Received	Attached
1 Potter Patent '841	187	187	187	1295
2 Potter Patent '172	187	187	187	1299
2-A File Wrapper of Pat. '975	188 & 772	773	773	
2-B Potter Pat. '975	188 & 773	773	773	1306
3-A Old Style Bearing Mfg. by Pltf.	191	192	192	
3-B Standard Bearing Mfg. by Pltf.	191	192	192	
4-A Bearing - Kahr HSBG-10	192	306	306	
4-B Bearing - Halfco HSB-10-SS	192	306	306	
11 Prentiss Rod End	189	253	253	
12 Heim Bearing	189	319	319	
13 Messerschmidt Bearing	190	317	317	
14 Bearing - PBR	194	311	312	
15 Notice of Shipment Dated 2/17/45	260 & 261	263	263	1311
16 Shipping Memo Dated 1/22/43	263	264	264	1312
17 Packing List Dated 1/23/45	265	265	265	1313
17-A Blueprint No. B-10051 - 3/2/45	278	280	280	1314
18 Purchase Order Dated 1/15/45	266	267	267	1315
19 Purchase Order Change Notice Dated 2/12/45	269	270	270	1316
20 Packing List Dated 2/13/45	270	271	271	1317
21 Blueprint B-10090 - Stearns Rod End	282	282	282	1318
22 Blueprint B-10100 - Stearns Rod End	284	284	284	1319
23 Upper and Lower Dies	285	290	290	
24 Bearing Assy.	285	290	290	
25 Pltf's Catalog	295	296	296	
26 Envelope Wrapping for Pltf's Bearing	320	320	322	
27 S. W. Catalog No. 551	322	325	325	
28 Douglas Blueprint No. 3511900	326-7	333	335	132
29 Douglas Blueprint	333	333	335	132
30 A-D Photographs of Tolerancing Machine of S. W. Prods.	345	1188	1188	132

Description	Page References in Record			
	Identified	Offered	Received	Attached
1 Bearing - Ball Loose	351	351	352	
2 Bearing - Ball Moves Radially	351	351	352	
3 Bearing - Ball Can be Turned by Hand	352	352	352	
4 Bearing - Tight Ball	353	353	358	
5 Bearing - Immovable with Stainless Steel Race	355	358	358	
6 Bearing - Movable with Stainless Steel Race	355-6	358	358	
7 Bearing - Stainless Steel	356	358	358	
8 Bearing - Tight	356	358	358	
9 Purchase Order Dated 12/15/45	437	438	439	1326
0 Packing List Dated 3/16/45	439	440	440	1327
1 Packing List Dated 3/26/45	440	441	441	1328
2 Packing List Dated 3/31/45	441	441	441	1329
3 Purchase Order Dated 1/17/45	442	442	443	1330
-A Copy of Letter of 1/26/45 by Hackman	442	442	443	1331
Douglas Blueprint No. Z3511851 - 1/17/53	443	444	444	1332
Pltf's Bearing - Preloaded	448	452	452	
Pltf's Bearing - Preloaded	448	452	452	
Bearing Submitted by Straub	478	479	479	
Kahr Bearing	478	479	479	
Halfco Blueprint Dated 11/30/55	479-80	481	481	1333
Blueprint - Kahr HSB - 3 Swage Die	479-80	481	481	1334
Liberated Bearing - HSBG-12S	483	489	489	
Unliberated Bearing - HSBG-12S	483	489	489	
Unassembled Ball and Race	487	489	489	
Bearing - Liberated by Hammering	507-8	508	508	
Photographs Made by Barish	525-6	532	532	1335
Photographs Made by Barish	525-6	532	532	1336
Photographs Made by Barish	525-6	532	532	1337
Pltf's Motion Picture	535	535	535	
A National Aircraft Std. NAS 36 Dec. 1942	540	541	541	1338
B National Aircraft Std. NAS 37 Dec. 1942	540	541	541	1339
C National Aircraft Std. NAS 38 Dec. 1942	540	541	541	1340

Description	Page References in Record			
	Identified	Offered	Received	Attache
60 Drawing Made by Colwell - "Chambers"	720	723	723	1341
61 Drawing Made by Colwell	758	758	758	1342
61-X Bearing From Visit to S.W. Prods. Plant	862	864		
61-Y Bearing From Visit to S.W. Prods. Plant	862	864		
62 Bearing From Visit to S.W. Prods. Plant	809	869	869	
63 Bearing From Visit to S.W. Prods. Plant	816	869	869	
64 Bearing From Visit to S.W. Prods. Plant	813	869	869	
65 Blueprint B-2400—S.W. Prod. Co.	866	869	869	1343
66 Bearing from Visit to S.W. Prods. Plant	828	869	869	
67 Bearing from Visit to S.W. Prods. Plant	829	869	869	
68 Photographs	936	936	936	
68 A-B- C-D Photographs	938	938	938	
69 Photographs	937	937	937	
70 Photographs	937	937	937	
71 Photographs	937	937	937	
72 Photographs	938	938	938	
73 Photographs	938	938	938	
74 Photographs	938	938	938	